

Chapter 7 System of Equations**Section 7.5: Using Elimination to Solve system of Linear Equations**

Example 4: For the following word problems, create a system of linear equations and solve using the method of elimination.

- a) A scientist worked for 6 days on a project and her assistant worked for 5 days, earning a total of \$780 together. They earned \$500 together on their next project, which required 4 days' work from the scientist and 3 days' work from the assistant. How much did each earn per day?
- b) A lifeguard earns an hourly rate for 20 h work in one week and an increased rate for overtime. One week Theresa worked 24 h and received \$166.40. The next week she worked 27.5 h and received \$200.00. Find her hourly rate and her overtime rate of pay.